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A LIST OF THE FAMILIES OF COLEOPTERA IN AMERICA, NORTH OF MEXICO.

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The following list is based on the work of Brues and Melander ("Key to the Families of North American Insects," 1915), with some corrections, the authorities for which are given in the notes. It is published at this time in the hope of eliciting such comment from the students of the Coleoptera that, in the event of a new Check List being published, the materials for a satisfactory arrangement of the families, after free discussion by those interested, may be available. It may be added that the work on which the list is based, for which we are most grateful to the authors, gives the definition of the family names employed, and is stated to be in turn based on the works of Sharp and Ganglbaur; and that it coincides, in the main, with the "Catalogus Coleopterrorum" of Junk, as far as that work has been completed. differences between its classification and that of Leconte and Horn, repeated in Henshaw's Check List, are the result of the studies during the last forty years of a host of Coleopterists, who have corrected conclusions derived by Leconte, mainly from consideration of the external adult characters, by studies of the larvæ in some families and by studies of the fossil insects in others; as well as by studies in some groups of the internal anatomy. The differences are not always very great, consisting often in treating Leconte's subfamilies as families or vice versa, or in changes in the relative position of the families. Of such changes in position, the greatest is in according the highest rank to the beetles with lamellate antennæ, a course which most

readers are probably already prepared to adopt, except possibly as it affects the relative position of the Rhynchophora.

The Rhynchophora were regarded by Leconte practically as a suborder, strongly differentiated by the rigid palpi, single gular suture, legless larvæ and, usually, by the beak. A continuance of this division would still permit of ending the Coleoptera genuina with the heteromerous, phytophagous and lamellicorn series in successively advanced rank, and avoid interpolating the Rhynchophora between them. Furthermore the Rhynchophora as a suborder would be more logically connected through the Brenthidæ with the Rhysodidæ of the Adephagous series, and through the Anthribidæ with the Bruchidæ of the Phytophagous series, than they would be if regarded as merely a series of equal taxonomic value with other series. I should therefore personally prefer to transpose the position of families 90 to 93 so that they would follow families 94 to 97, but separated as a suborder so as to leave the Scarabæidæ at the end of Coleoptera genuina.

On this as well as on the minor points covered by the notes I shall be glad to receive the comment of the reader. No such changes, however based purely on personal opinion, have been here made; the arrangement of the families follows that of Brues and Melander except as noted below where there is a conflict of authorities.

ORDER COLEOPTERA

SUBORDER ADEPHAGA

1. Carabidæ¹

5. Gyrinidæ

2. Haliplidæ3. Amphizoidæ

6. Rhysodidæ

4. Dytiscidæ

7. Cupedidæ²

SUBORDER POLYPHAGA

Series Palpicornia

8. Hydrophilidæ

Series Staphyliniformia

9. Silphidæ 10. Scydmænidæ

11. Leptinidæ

12. Clambidæ 13. Orthoperidæ³

14. Ptiliidæ4

15. Sphæriidæ

16. Hydroscaphidæ

17. Scaphidiidæ

18. Platypsyllidæ

19. Staphylinidæ

20. Pselaphidæ

21. Histeridæ

Series Malacodermata

22. Lycidæ

23. Lampyridæ

24. Telephoridæ

25. Malachiidæ

26. Melyridæ⁵

27. Cleridæ

28. Corvnetidæ

29. Derodontidæ

Series Cucujoidea

30. Cucujidæ

Series CLAVICORNIA

31. Trogositidæ6

32. Nitidulidæ

33. Rhizophagidæ7 34. Erotylidæ

35. Mycetæidæ

36. Cryptophagidæ

37. Phalacridæ

38. Lathridiidæ

39. Tritomidæ8

40. Monædidæ9

41. Colydiidæ

42. Cioidæ

43. Sphindidæ

44. Endomychidæ

45. Coccinellidæ

Series Brachymera

46. Byturidæ

48. Nosodendridæ

47. Dermestidæ

49. Byrrhidæ

Series Macrodactylia

50. Georyssidæ

53. Eucinetidæ

51. Heteroceridæ 52. Helodidæ

54. Parnidæ¹⁰

Series Serricornia

55. Chelonariidæ 57. Rhipiceridæ

56. Dascillidæ

Series STERNOXIA

58. Cebrionidæ 60. Eucnemidæ 59. Elateridæ 61. Throscidæ

Series Buprestoidea

62. Buprestidæ

Series TERIDILIA

63. Lymexylonidæ 66. Lyctidæ 64. Micromalthidæ 67. Ptinidæ 65. Bostrichidæ 68. Anobiidæ

Series HETEROMERA

69. Oedemeridæ 78. Monommidæ 70. Cephaloonidæ 79. Othniidæ 71. Pythidæ 8o. Aegialitidæ 72. Pyrochroidæ 81. Lagriidæ 73. Hylophilidæ 82. Alleculidæ11 74. Pedilidæ 83. Tenebrionidæ 75. Anthicidæ 84. Meloidæ 76. Melandryidæ 85. Mordellidæ 86. Rhipiphoridæ 77. Scraptidæ

Series Phytophaga

87. Cerambycidæ 89. Bruchidæ 88. Chrysomelidæ

Series RHYNCHOPHORA

90. Brenthidæ 92. Curculionidæ 91. Anthribidæ¹² 93. Scolytidæ¹³

Series LAMELLICORNIA

94. Lucanidæ 96. Passalidæ 95. Sinodendridæ 97. Scarabæidæ¹⁴

ORDER STREPSIPTERA

98 Xenidæ¹⁵

- 1. Cicindelidæ of Henshaw's Check List are included as a subfamily of Carabidæ in accordance with Dr. Walther Horn's work in Genera Insectorum.
 - 2. Cupedidæ is the spelling used in recent works in place of Cupesidæ.
- 3. Orthoperidæ is equivalent to Corylophidæ as far as our fauna is concerned. A family called Aphenocephalidæ, Pseudocorylophidæ or Discolomidæ by different authors is, however, separable in tropical America and may possibly be found in southern Florida at some future time.
 - 4. Ptiliidæ is used in recent works instead of Trichopterygidæ.
- 5. Melyridæ are separated as a family by Col. Thomas L. Casey (Ann. N. Y. Ac. Sci., VIII, 456) and the excellent reasons given appear to have been overlooked.
- 6. The family Trogositidæ has been called Temnochilidæ by most recent authors; also Ostomidæ and Ostomatidæ; and has been by some divided into two families. Until the promised revision by Mr. Charles Schaeffer appears, it seems best to retain the name used in the Henshaw Check List.
- 7. The Rhizophagidæ are treated as a separate family by A. Méquignon in the Junk Catalogue and are omitted by A. Grouvelle in his treatment of the Nitidulidæ.
- 8. Tritomidæ is used instead of Mycetophagidæ following Casey (Journ. N. Y. Ent. Soc., VIII, 1900).
- 9. Monædidæ is used instead of Adimeridæ because Monædus Horn has precedence over Adimerus Sharp.
- 10. The name Parnidæ is retained because there has been much argument as to the validity of Dryops, the priority of which name has led many to call the family Dryopidæ.
- 11. The name Alleculidæ is used by F. Borchmann in the Junk Catalogus, following Seidlitz instead of Cistelidæ.
- 12. The name Anthribidæ may have to be changed on grounds of priority; but it seems best to await the completion of the studies of Dr. W. Dwight Pierce in the synonymy of the Rhynchophora.
- 13. Dr. A. D. Hopkins has shown that Scolytidæ (not Ipidæ) is the proper name for this family; and that Platypodidæ of many authors is more correctly treated as a subordinate division.
- 14. The Trogidæ are separated as a family by Brues and Melander; but, being treated as a subfamily of Scarabæidæ by Mr. Gilbert J. Arrow in the Junk Catalogus, the same course is here followed.
- 15. The Xenidæ are equivalent to Dr. Leconte's Stylopidæ and are included for that reason though not Coleoptera.